

NEW COMBINATIONS IN *CHAMAESYCE* A. GRAY (EUPHORBIACEAE)
FROM TEXAS AND THE CHIHUAHUAN DESERT

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ABSTRACT

Chamaesyce A. Gray is a well-understood and widely-utilized generic name for a distinctive group of species that are often and justifiably segregated from *Euphorbia* L. However, a complete set of names in *Chamaesyce* is not available. New combinations, clarifications, and an updated list (Table 1) of *Chamaesyce* species are provided for Texas and the Chihuahuan Desert region.

KEY WORDS: *Chamaesyce*, Euphorbiaeae, Euphorbiaceae, nomenclature

The unique characteristics of *Chamaesyce* A. Gray are clear and were recently enumerated by Mayfield (1991), but the issue of generic recognition for *Chamaesyce* was not discussed. McVaugh (1993) has reviewed the various arguments for and against generic recognition of *Chamaesyce* and these need not be reiterated here. In general, however, the recognition of *Chamaesyce* as a genus distinct from the rest of *Euphorbia* L. is only a small part of separating *Euphorbia* sensu lato (=subtribe Euphorbiinae Hurasawa) into smaller generic components. An inclusive *Euphorbia* should include all of the subtribe Euphorbiinae which includes the well-known *Pedilanthus* Neck. ex Poit., *Synadenium* Boiss., *Monadenium* Pax, *Elaeophorbium* Stapf, among others, genera which have a long history but are no more separate from the core of *Euphorbia* than are such commonly included groups as *Poinsettia* Graham, *Agaloma* Raf., *Tithymalus* Gaertn., and *Chamaesyce*. Conversely, taxonomic consistency dictates the eventual recognition of the latter groups given the recognition of the former widely accepted genera. The new combinations made here do not constitute complete taxonomic consistency in either way (inclusive or segregated *Euphorbia*), but it is clear that the species of *Chamaesyce* constitute a group far removed from the group of African species which includes the type of the

genus *Euphorbia*. Such consistency may only be facilitated in a modern worldwide conspectus of the genera of cyathiate Euphorbiaceae (Tribe Euphorbieae Dumortier).

Chamaesyce chaetocalyx (Boiss.) Wooton & Standl. var. *triligulata* (L.C. Wheeler) Mayfield, *comb. nov.* BASIONYM: *Euphorbia fendleri* Torr. & Gray var. *triligulata* L.C. Wheeler, Bull. Torrey Bot. Club 63:445. 1936.

Chamaesyce fendleri (Torr. & Gray) Small var. *triligulata* (L.C. Wheeler) Shinners, Field and Lab 17:70. 1949. *Euphorbia chaetocalyx* (Boiss.) Tidestr. var. *triligulata* (L.C. Wheeler) M.C. Johnst., Wrightia 5:139. 1975.

Chamaesyce crepitata (L.C. Wheeler) Mayfield, *comb. nov.* BASIONYM: *Euphorbia crepitata* L.C. Wheeler, Contr. Gray Herb. 27:60. 1939.

Chamaesyce crepitata (L.C. Wheeler) Mayfield var. *longa* (M.C. Johnst.) Mayfield, *comb. nov.* BASIONYM: *Euphorbia crepitata* L.C. Wheeler var. *longa* M.C. Johnst., Wrightia 5:139. 1975.

Chamaesyce fruticulosa (Boiss.) Millsp. BASIONYM: *Euphorbia fruticulosa* Boiss. in DC., Prodr. 15(2):38. 1862. *Chamaesyce fruticulosa* (Boiss.) Millsp., Field Mus. Bot. Ser. 2:409. 1916.

The epithet in Millspaugh's (1916) new combination, as well as in his citation of the basionym, was apparently misspelled in his publication; and no other species of *Euphorbia* or *Chamaesyce* has ever been published with "*fruticulosa*" as the epithet. The combination is still attributed to Millspaugh but the corrected spelling is provided.

Chamaesyce fruticulosa (Boiss.) Millsp. var. *hirtella* (M. C. Johnst.) Mayfield, *comb. nov.* BASIONYM: *Euphorbia fruticulosa* Boiss. var. *hirtella* M.C. Johnst., Wrightia 5:141. 1975.

Chamaesyce geyeri (Engelm.) Small var. *wheeleriana* (Warnock & M.C. Johnst.) Mayfield, *comb. nov.* BASIONYM: *Euphorbia geyeri* Engelm. var. *wheeleriana* Warnock & M.C. Johnst., Southw. Naturalist 14:127-128. 1969.

Chamaesyce johnstonii (Mayfield) Mayfield, *comb. nov.* BASIONYM: *Euphorbia johnstonii* Mayfield, Sida 14:573-579. 1991.

Chamaesyce simulans (L.C. Wheeler) Mayfield, *comb. nov.* BASIONYM: *Euphorbia polycarpa* Benth. var. *simulans* L.C. Wheeler, Rhodora 43:192. 1941. *Euphorbia simulans* (L.C. Wheeler) Warnock & M.C. Johnst., Southw. Naturalist 5:170. 1960.

Chamaesyce theriaca (L.C. Wheeler) Shinnars var. *spurca* (M.C. Johnst.) Mayfield, *comb. nov.* BASIONYM: *Euphorbia theriaca* L.C. Wheeler var. *spurca* M.C. Johnst., *Wrightia* 5:138. 1975.

Notes on selected species

Chamaesyce johnstonii is not included in Table I because it does not occur in Texas or the Chihuahuan Desert Region (CDR).

Chamaesyce velleriflora has been reported as new to Texas by Carr & Mayfield (in press). The nomenclature of this species has been recently questioned by McVaugh (pers. comm.) but the concept used here is the same as that (as *Euphorbia velleriflora*) in Johnston (1975).

Chamaesyce lasiocarpa (Klotzsch) Arthur (as *Euphorbia lasiocarpa* Klotzsch in Johnston, 1975) is a plant of tropical forests and does not occur in Texas or the Chihuahuan Desert region. Plants included under that name in Johnston (1975) are, in the broad sense, referable to *C. berteriana* (Balb.) Millsp. This species is relatively rare in the eastern part of the Mexican CDR. *Chamaesyce berteriana* is distinct from other *Chamaesyce* species of Texas and the CDR in having the carpellary septa of mature capsules cleft to the columella.

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Table I. List of currently accepted names for *Chamaesyce* species from Texas and adjacent Chihuahuan Desert region of México* (compiled from Johnston [1990] and Johnston [1975]).

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- C. acuta* (Engelm.) Millsp.
C. albomarginata (Torrey & Gray) Small
C. ammannioides (H.B.K.) Small
C. angusta (Engelm.) Small
C. arizonica (Engelm. in Torr.) Arthur
C. astyla (Boiss.) Millsp.
^o*C. berteriana* (Balb.) Millsp.
C. capitellata (Engelm.) Millsp.
C. carunculata (Waterfall) Shinnery
C. chaetocalyx (Boiss.) Woot. & Standl.
C. chaetocalyx (Boiss.) Woot. & Standl. var. *triligulata* (L.C. Wheeler)
 Mayfield
C. cinerascens (Engelm. in Torr.) Small
C. cordifolia (Ell.) Small
^o*C. crepitata* (L.C. Wheeler) Mayfield
^o*C. crepitata* (L.C. Wheeler) Mayfield var. *longa* (M.C. Johnston) Mayfield
^o*C. cumbrae* (Boiss.) Millsp.
C. fendleri (Torrey & Gray) Small
^o*C. fruticulosa* (Boiss.) Millsp.
^o*C. fruticulosa* (Boiss.) Millsp. var. *hirtella* (M.C. Johnston) Mayfield
C. geyeri (Engelm.) Small
C. geyeri (Engelm.) Small var. *wheeleriana* (Warnock & M.C. Johnston)
 Mayfield
C. glyptosperma (Engelm.) Small
C. golondrina (L.C. Wheeler) Shinnery
C. hirta (L.) Millsp.
C. humistrata (Engelm.) Small
C. hypericifolia (L.) Millsp.
C. hyssopifolia (L.) Small
C. indivisa (Engelm.) Millsp.
C. jejuna (Warnock & M.C. Johnston) Shinnery
C. laredana (Millsp.) Small
C. lata (Engelm. in Torr.) Small
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Table I (cont.).

<i>C. maculata</i> (L.) Small
<i>C. micromera</i> (Boiss.) Woot. & Standl.
<i>C. missurica</i> (Raf.) Shinnery
<i>C. nutans</i> (Lag.) Small
<i>C. parryi</i> (Engelm.) Rydb.
<i>C. perennans</i> Shinnery
<i>C. prostrata</i> (Ait.) Small
<i>C. revoluta</i> (Engelm.) Small
° <i>C. scopulorum</i> (Brandeg.) Millsp.
° <i>C. scopulorum</i> (Brandeg.) Millsp. var. <i>inornata</i> (M.C. Johnston) Raju & Rao
° <i>C. scopulorum</i> (Brandeg.) Millsp. var. <i>nuda</i> (M.C. Johnston) Raju & Rao
<i>C. serpens</i> (H.B.K.) Small
<i>C. serpyllifolia</i> (Pers.) Small
<i>C. serrula</i> (Engelm.) Woot. & Standl.
<i>C. setiloba</i> (Engelm. ex Torrey) Millsp.
<i>C. simulans</i> (L.C. Wheeler) Mayfield
<i>C. stictospora</i> (Engelm.) Small
° <i>C. stictospora</i> (Engelm.) Small var. <i>sublaevis</i> (M.C. Johnston) Raju & Rao
<i>C. theriaca</i> (L.C. Wheeler) Shinnery
° <i>C. theriaca</i> (L.C. Wheeler) Shinnery var. <i>spurca</i> (M.C. Johnston) Mayfield
<i>C. velleriflora</i> (Kl. & Gke.) Millsp. BASIONYM: <i>Anisophyllum velleriflorum</i> Kl. & Gke.
<i>C. villifera</i> (Scheele) Small

*Basionyms of recombined names are in *Euphorbia* except as indicated in the table.

°Species of Mexican Chihuahuan Desert Region and not known to occur in Texas.

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